

APPENDIX II:

THE AMENDED CLAIMS (clean version of all claims):

21. (currently amended) A hydrogenation catalyst comprising, as catalytically effective component, a composition consisting of
 - (a) iron or a compound based on iron or a mixture thereof,
 - (b) from 0.001 to 0.3% by weight based on (a) of a promoter based on 2, 3, 4 or 5 elements selected from the group consisting of aluminum, silicon, zirconium, titanium and vanadium,
 - (c) from 0 to 0.3% by weight based on (a) of a compound based on an alkali and/or alkaline earth metal, and
 - (d) from 0.001 to 1% by weight based on (a) of manganese.
22. (currently amended) The catalyst defined in claim 21, wherein the catalytically effective component is obtained by reduction with or without subsequent passivation of a magnetite.
23. (currently amended) The catalyst defined in claim 21, wherein the catalytically effective component is obtained by precipitating precursors of constituents (a), (b), (d) and optionally (c) in the presence or absence of support materials.
24. (currently amended) The catalyst defined in claim 21, which is obtained by impregnating a support with a solution of constituents (a), (b), (d) and optionally (c).
25. (currently amended) The catalyst defined in claim 21, which is obtained by spraying constituents (a), (b), (d) and optionally (c) onto a support.
26. (previously added) The catalyst defined in claim 21, which has a BET surface area of from 3 to 20 m²/g, a total pore volume of from 0.05 to 0.2 mL/g, an average pore diameter of from 0.03 to 0.1 μm and a 0.01 to 0.1 μm pore volume fraction within the range from 50 to 70%.
27. (currently amended) The catalyst defined in claim 21, wherein the promoter elements (b) are selected from aluminum, silicon and titanium.
28. (currently amended) The catalyst defined in claim 21, wherein constituent (c) is based on magnesium and/or calcium.

29. (currently amended) The catalyst defined in claim 21, wherein constituent (c) is present in an amount of from 0.01 to 0.2% by weight based on (a).
30. (currently amended) The catalyst defined in claim 21, wherein constituent (c) is present in an amount of from 0.01 to 0.1% by weight based on (a).
31. (currently amended) The catalyst defined in claim 21, wherein constituent (d) is present in an amount of from 0.001 to 0.3% by weight based on (a).
32. (currently amended) The catalyst defined in claim 21, wherein constituent (d) is present in an amount of from 0.01 to 0.2% by weight based on (a).
33. (currently amended) A hydrogenation catalyst consisting essentially of a catalytically effective component and a support material, wherein the catalytically effective component is a composition consisting of
 - (a) iron or a compound based on iron or a mixture thereof,
 - (b) from 0.001 to 0.3% by weight based on (a) of a promoter based on 2, 3, 4 or 5 elements selected from the group consisting of aluminum, silicon, zirconium, titanium and vanadium,
 - (c) from 0 to 0.3% by weight based on (a) of a compound based on an alkali and/or alkaline earth metal, and
 - (d) from 0.001 to 1% by weight based on (a) of manganese.
34. (currently amended) The catalyst defined in claim 33, wherein the catalytically effective component is obtained by reduction with or without subsequent passivation of a magnetite.
35. (currently amended) The catalyst defined in claim 33, which is obtained by precipitating precursors of constituents (a), (b), (d) and optionally (c) in the presence of the support materials.
36. (currently amended) The catalyst defined in claim 33, which is obtained by impregnating the support with a solution of constituents (a), (b), (d) and optionally (c).
37. (currently amended) The catalyst defined in claim 33, which is obtained by spraying constituents (a), (b), (d) and optionally (c) onto the support.

38. (previously added) The catalyst defined in claim 33, which has a BET surface area of from 3 to 20 m²/g, a total pore volume of from 0.05 to 0.2 mL/g, an average pore diameter of from 0.03 to 0.1 μm and a 0.01 to 0.1 μm pore volume fraction within the range from 50 to 70%.
39. (currently amended) The catalyst defined in claim 33, wherein constituent (c) is present in an amount of from 0.01 to 0.2% by weight based on (a).
40. (currently amended) The catalyst defined in claim 33, wherein constituent (d) is present in an amount of from 0.001 to 0.3% by weight based on (a).
41. (new) A catalytically effective composition consisting of
 - (a) iron or a compound based on iron or a mixture thereof,
 - (b) from 0.001 to 0.3% by weight based on (a) of a promoter based on 2, 3, 4 or 5 elements selected from the group consisting of aluminum, silicon, zirconium, titanium and vanadium,
 - (c) from 0 to 0.3% by weight based on (a) of a compound based on an alkali and/or alkaline earth metal, and
 - (d) from 0.001 to 1% by weight based on (a) of manganese.
42. (new) The composition defined in claim 41, which is obtained by reduction with or without subsequent passivation of a magnetite.
43. (new) The composition defined in claim 41, wherein the promoter elements (b) are selected from aluminum, silicon and titanium.
44. (new) The composition defined in claim 41, wherein constituent (c) is based on magnesium and/or calcium.
45. (new) The composition defined in claim 41, wherein constituent (c) is present in an amount of from 0.01 to 0.2% by weight based on (a).
46. (new) The composition defined in claim 41, wherein constituent (c) is present in an amount of from 0.01 to 0.1% by weight based on (a).
47. (new) The composition defined in claim 41, wherein constituent (d) is present in an amount of from 0.001 to 0.3% by weight based on (a).

48. (new) The composition defined in claim 41, wherein constituent (d) is present in an amount of from 0.01 to 0.2% by weight based on (a).